WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to September 1993, June to September 1994, July through September 1996 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.0 °C Aug. 3-5, 1994.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 22.3 °C July 27, 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
24...	1100	12500	429	8.6	7.5	6.5	1.3	11.2	107	K2	--
MAY											
22...	1445	11300	418	8.7	13.5	12.0	3.0	10.0	109	K1	220
JUN											
20...	1430	12200	352	8.7	25.0	16.0	1.9	9.1	108	K4	K13
JUL											
10...	1200	12200	342	8.5	29.5	18.0	1.2	8.7	107	22	110
AUG											
07...	1215	9520	345	8.6	28.0	17.0	3.1	8.5	102	K4	38
SEP											
04...	1300	8090	361	8.7	30.5	17.5	2.4	8.5	105	K13	84

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
SEP									
04...	150	42	12	14	16	2.6	160	5	140

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
SEP								
04...	28	13	0.5	15	210	211	0.29	4590

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR								
24...	<0.01	<0.05	<0.015	0.3	<0.01	<0.01	8	270
MAY								
22...	0.01	<0.05	0.020	0.2	<0.01	<0.01	8	244
JUN								
20...	<0.01	<0.05	0.020	0.2	0.07	<0.01	5	165
JUL								
10...	0.02	1.8	0.05	0.3	0.06	0.06	2	66
AUG								
07...	<0.01	0.06	0.020	0.3	0.05	0.03	10	257
SEP								
04...	0.01	<0.05	0.020	0.4	0.06	0.03	6	131

K Results based on counts outside ideal colony range.

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JULY			AUGUST			SEPTEMBER		
1	---	---	---	22.0	21.3	21.6	20.2	19.4	19.8
2	---	---	---	21.7	21.0	21.4	19.9	19.2	19.5
3	---	---	---	21.2	20.3	20.7	20.0	19.0	19.3
4	---	---	---	20.3	19.5	20.0	19.7	19.0	19.2
5	---	---	---	19.9	18.7	19.4	19.0	18.2	18.8
6	---	---	---	19.0	18.2	18.6	18.7	17.9	18.2
7	---	---	---	19.4	18.1	18.7	18.6	17.7	18.0
8	---	---	---	19.5	18.7	19.0	18.4	17.4	17.8
9	---	---	---	19.2	18.1	18.8	18.6	17.4	17.7
10	---	---	---	19.5	18.1	18.7	18.4	17.4	17.7
11	---	---	---	20.7	18.9	19.8	18.7	17.7	18.1
12	---	---	---	20.2	19.2	19.8	18.7	17.7	18.0
13	---	---	---	20.2	19.0	19.7	18.2	17.4	17.8
14	---	---	---	20.5	19.7	20.1	18.1	17.3	17.5
15	---	---	---	21.7	19.9	20.7	17.7	16.6	17.2
16	---	---	---	22.0	21.0	21.4	16.8	16.2	16.5
17	21.5	20.2	20.7	21.2	20.5	20.8	16.3	15.4	15.8
18	21.0	20.2	20.6	20.5	19.9	20.2	15.8	14.9	15.3
19	20.7	19.7	20.2	20.7	19.9	20.2	15.4	14.6	14.9
20	20.3	19.5	19.8	20.2	19.5	19.8	15.5	14.3	14.8
21	20.3	19.4	19.7	20.0	19.2	19.6	15.4	14.3	14.7
22	20.3	19.2	19.7	20.0	19.0	19.4	15.0	14.0	14.4
23	20.7	19.5	20.0	20.2	19.0	19.4	14.7	13.6	14.0
24	21.0	19.9	20.3	20.3	19.4	19.7	14.6	13.5	13.9
25	20.7	20.0	20.3	20.5	19.4	19.8	14.1	13.2	13.5
26	21.5	20.0	20.8	20.7	19.7	20.2	14.0	12.9	13.2
27	22.3	20.8	21.5	20.7	19.7	20.1	13.8	12.7	13.1
28	22.0	21.0	21.4	20.2	19.4	19.7	14.1	12.7	13.2
29	22.0	20.8	21.4	20.2	19.2	19.7	14.3	12.7	13.2
30	21.7	20.3	21.0	20.8	19.5	20.0	14.4	12.9	13.4
31	22.3	20.8	21.5	20.5	19.7	20.1	---	---	---
MONTH	---	---	---	22.0	18.1	19.9	20.2	12.7	16.3

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to September 1996 (discontinued).

COLLECTION METHODS.--Composite of 5, 0.25 m^2 samples. Richest targeted habitat--riffles, half field sub-sample.
MESH SIZE.--425 um.

AVERAGE DEPTH.--0.48 m.

AVERAGE PERCENT SHADING.--3.

AVERAGE VELOCITY.--0.69 m/s.

SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4.

PERCENT FINES RANGE.--10.

HABITAT QUALITY INDEX.--NA.

REMARKS.--Large river, riffles uncommon.

BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE JULY 30	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	FUNC-TIONAL FEEDING GROUP	POLLU-TION TOLER-ANCE VALUE
NON-INSECTS					
Physella integra		113	0.16	CG	8
Gyraulus parvus		338	0.48	SC	6
Cladocera		30150	42.68	CF	8
Copepoda		788	1.11	CG	8
Hyalella azteca		1238	1.75	CG	8
EPHEMEROPTERA					
Baetis tricaudatus		1800	2.55	CG	6
Tricorythodes minutus		788	1.11	CG	4
TRICHOPTERA					
Hydropsyche		34538	48.89	CF	4
LEPIDOPTERA					
Petrophila		112.5	0.32	SC	5
DIPTERA					
Simuliidae		281.3	0.8	CF	6
CHIRONOMIDAE					
Chironomidae-pupae		56.25	0.16	UN	6

TOTAL NUMBER OF TAXA	11	EPT ABUNDANCE	37125/m^2
TOTAL NUMBER OF ORGANISMS	70651/m^2	NUMBER EPT TAXA	3
HILSENHOFF BIOTIC INDEX	5.92	SHANNON DIVERSITY INDEX (H)	1.56

COLLECTION METHODS.--Qualitative multiple habitat, relative abundance, whole sample.
MESH SIZE.--210 um.
GEAR TYPE.--D-frame net and visual collections.

REACH LENGTH.--515 m.

AVERAGE WIDTH.--119 m $_{e}$.

HABITAT QUALITY INDEX.--NA.

REMARKS.-- Large river, riffles common.

BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE JULY 30	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	FUNC-TIONAL FEEDING GROUP	POLLU-TION TOLER-ANCE VALUE
NON-INSECTS					
Nematoda		30	0.39	PA	5
Oligochaeta		1215	15.82	CG	5
Hirudinea		15	0.2	PR	10
Sphaeriidae		15	0.2	CG	8
Stagnicola caperata		495	6.45	CG	6
Physella integra		180	2.34	CG	8
Gyraulus parvus		570	7.42	SC	6
Copepoda		15	0.2	CG	8
Ostracoda		15	0.2	CG	8
Hyalella azteca		1335	17.38	CG	8
Acari		15	0.2	PA	5
EPHEMEROPTERA					
Baetis tricaudatus		465	6.05	CG	6
Tricorythodes minutus		480	6.25	CG	4
TRICHOPTERA					
Helicopsyche borealis		15	0.2	SC	3
Hydropsyche		1860	24.22	CF	4
Hydroptila		30	0.39	PH	6
Ochrotrichia		60	0.78	PH	4
Limnephilus		15	0.2	SH	3
LEPIDOPTERA					
Petrophila		15	0.2	SC	5
COLEOPTERA					
Psephenus		15	0.2	SC	4
DIPTERA					
Ceratopogoninae		15	0.2	PR	6
Simuliidae		75	0.98	CF	6
CHIRONOMIDAE					
Chironomidae-pupae		75	0.98	UN	6
Cardiocladius		45	0.59	PR	5
Chironomus		15	0.2	CG	10
Cricotopus		165	2.15	CG	7
Cricotopus Bicinctus Gr.		180	2.34	CG	7
Dicrotendipes		150	1.95	CG	8
Eukiefferiella		15	0.2	OM	8
Orthocladius Complex		30	0.39	CG	6
Paratanytarsus		45	0.59	UN	6
Polypedilum		15	0.2	OM	6

TOTAL NUMBER OF TAXA	32	EPT ABUNDANCE	2925
TOTAL NUMBER OF ORGANISMS	7680	NUMBER EPT TAXA	7
HILSENHOFF BIOTIC INDEX	5.70	SHANNON DIVERSITY INDEX (H)	3.47

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to 1996, April to September 1998 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to September 1993, June to September 1994, July to September 1996, February to September 1998 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.0 °C Aug. 3-5, 1994; minimum recorded, 0.8 °C March 8, 1998.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 23.6 °C July 25, 29-30; minimum recorded, 0.8 °C March 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
08...	0915	12200	421	8.6	2.0	6.0	2.8	10.9	102	K15	K32
MAY											
05...	0915	10500	426	8.3	15.0	13.0	1.6	9.3	105	K10	160
JUN											
11...	0900	18500	369	8.4	13.5	15.0	1.0	8.7	101	K2	K7
JUL											
09...	0930	10500	351	8.4	21.5	20.0	1.9	9.2	119	K4	31
AUG											
05...	0915	10200	350	8.4	25.0	22.5	1.0	8.2	110	K11	160
SEP											
10...	0915	8820	383	8.1	13.0	20.0	--	7.1	93	17	67

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)
SEP								
10...	160	42	12	15	17	2.9	160	5

DATE	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
SEP								
10...	137	29	14	.62	14	211	.29	5030

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR								
08...	<.010	.122	.029	.41	.028	.011	7	231
MAY								
05...	.011	<.050	.033	.33	<.010	<.010	4	113
JUN								
11...	.012	.063	.035	.32	.037	<.010	3	150
JUL								
09...	<.010	<.050	.026	.31	<.010	.017	4	113
AUG								
05...	<.010	<.050	.046	.34	.023	.019	6	165
SEP								
10...	<.010	<.050	.024	.43	.073	.034	11	262

K Results based on counts outside ideal colony range.

SNAKE RIVER MAIN STEM

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

WATRER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	2.1	1.6	1.7	6.1	5.5	5.8	13.1	12.0	12.5
2	---	---	---	1.9	1.7	1.8	6.0	5.7	5.8	13.6	12.2	12.8
3	---	---	---	2.1	1.7	1.9	6.1	5.7	5.8	12.7	11.4	12.2
4	---	---	---	2.2	1.6	1.8	6.0	5.8	5.8	12.7	11.4	12.1
5	---	---	---	2.5	1.7	2.0	6.3	5.7	6.0	13.4	12.2	12.8
6	---	---	---	2.2	1.3	1.8	6.5	5.8	6.1	14.5	13.0	13.6
7	---	---	---	2.1	0.9	1.5	6.6	5.8	6.2	14.4	13.4	13.9
8	---	---	---	1.9	0.8	1.2	6.8	6.1	6.4	14.2	12.5	13.6
9	---	---	---	3.6	1.1	1.8	7.1	6.5	6.7	13.3	12.4	12.8
10	---	---	---	3.8	1.3	2.2	7.4	6.8	7.0	13.6	12.5	13.1
11	---	---	---	3.6	1.7	2.4	7.9	7.1	7.3	13.9	13.0	13.3
12	---	---	---	3.6	2.1	2.8	7.7	7.2	7.4	13.6	13.3	13.4
13	---	---	---	4.0	2.5	3.2	7.7	7.2	7.4	13.6	12.7	13.1
14	---	---	---	4.1	3.2	3.6	7.5	7.2	7.3	12.7	12.0	12.5
15	---	---	---	4.3	3.6	4.0	7.5	6.9	7.2	12.2	11.7	12.0
16	---	---	---	4.9	4.0	4.4	7.4	6.9	7.1	12.4	11.9	12.1
17	---	---	---	5.2	4.6	4.9	7.2	6.8	7.0	12.0	11.6	11.8
18	---	---	---	5.5	4.9	5.1	7.7	6.8	7.1	11.9	11.3	11.6
19	---	---	---	5.7	4.9	5.2	7.5	6.9	7.2	12.4	11.6	12.0
20	---	---	---	6.1	5.1	5.5	8.5	7.2	7.9	12.7	12.0	12.4
21	---	---	---	6.3	5.5	5.8	9.2	8.2	8.7	12.8	12.4	12.5
22	---	---	---	6.0	5.7	5.8	9.9	8.9	9.5	12.7	12.4	12.5
23	---	---	---	6.0	5.5	5.7	10.5	9.6	9.9	12.8	12.5	12.7
24	---	---	---	6.1	5.8	5.9	10.2	9.2	9.8	13.1	12.5	12.8
25	---	---	---	6.1	5.8	6.0	9.9	9.4	9.7	13.4	12.8	13.2
26	---	---	---	6.6	6.0	6.2	10.2	9.2	9.6	13.4	13.0	13.2
27	2.2	1.6	1.8	6.8	5.8	6.2	10.3	9.2	9.7	13.3	13.0	13.0
28	2.1	1.4	1.6	6.3	5.8	6.1	10.8	9.4	10.1	13.9	13.0	13.5
29	---	---	---	5.8	5.5	5.6	11.9	10.2	10.9	13.8	13.4	13.6
30	---	---	---	6.1	5.4	5.6	12.8	11.0	12.0	13.9	13.4	13.7
31	---	---	---	6.1	5.4	5.7	---	---	---	14.2	13.6	13.8
MONTH	---	---	---	6.8	0.8	4.0	12.8	5.5	7.8	14.5	11.3	12.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	13.8	14.2	18.4	17.7	18.0	22.6	22.1	22.4	21.5	20.5	20.9
2	15.2	14.5	14.8	20.0	17.6	18.9	22.6	22.0	22.2	21.6	20.8	21.2
3	15.2	14.7	14.8	19.7	17.9	19.0	23.0	21.8	22.4	21.8	20.8	21.3
4	14.8	14.5	14.7	20.0	17.6	18.9	23.3	22.5	22.9	22.0	21.3	21.6
5	15.2	14.4	14.7	20.0	18.7	19.5	23.5	22.6	23.0	22.0	21.6	21.8
6	14.7	14.4	14.5	20.1	19.3	19.8	23.1	22.5	22.8	22.0	21.3	21.6
7	14.8	14.2	14.6	20.6	19.3	19.9	22.6	22.0	22.3	22.0	21.1	21.4
8	15.5	14.7	15.0	21.5	19.3	20.3	22.6	22.0	22.3	21.8	21.1	21.3
9	15.3	14.8	15.1	21.8	20.1	21.0	23.1	22.3	22.6	21.6	21.0	21.2
10	15.6	15.0	15.3	21.3	20.8	21.0	23.0	22.0	22.4	21.3	20.6	21.0
11	16.4	15.3	15.7	20.8	19.5	20.4	23.1	22.1	22.5	21.5	20.6	20.9
12	16.3	15.8	16.0	20.6	19.8	20.1	22.6	21.8	22.2	20.8	20.5	20.6
13	16.0	15.5	15.7	21.1	20.0	20.4	22.6	21.8	22.1	21.0	20.3	20.5
14	16.4	15.8	16.0	21.1	19.8	20.4	22.6	22.0	22.2	21.3	20.0	20.5
15	16.1	15.6	15.8	22.3	20.8	21.4	22.6	22.0	22.3	21.5	20.3	20.8
16	15.6	15.2	15.5	22.6	21.3	21.9	23.0	22.3	22.6	21.5	20.5	20.9
17	15.2	14.8	14.9	23.5	22.1	22.8	22.8	22.3	22.6	21.3	20.3	20.7
18	15.2	14.7	14.8	22.8	21.3	21.8	22.6	22.0	22.3	20.5	19.5	20.1
19	15.0	14.7	14.8	22.5	21.3	21.9	22.5	21.8	22.1	19.5	18.8	19.2
20	15.5	14.5	14.9	22.0	21.5	21.8	22.1	21.5	21.8	19.2	18.4	18.7
21	16.3	14.8	15.5	23.0	21.8	22.3	21.8	21.1	21.4	18.7	17.4	18.2
22	15.8	15.0	15.5	23.3	22.1	22.6	21.5	21.0	21.2	18.7	17.9	18.2
23	16.3	15.0	15.8	23.1	22.0	22.5	21.3	21.0	21.1	18.5	17.6	17.9
24	17.1	16.0	16.5	23.1	22.6	22.8	21.1	20.6	20.8	18.5	17.4	17.9
25	17.4	16.4	16.9	23.6	22.6	23.1	21.3	20.5	20.8	18.0	17.2	17.5
26	17.4	16.6	16.9	23.0	22.1	22.6	21.0	20.5	20.8	17.9	17.1	17.3
27	17.2	16.6	16.9	23.0	22.0	22.5	21.1	20.3	20.6	17.9	16.9	17.3
28	17.7	16.7	17.1	23.3	22.0	22.7	21.1	20.3	20.8	18.0	16.9	17.3
29	18.4	16.7	17.3	23.6	22.8	23.1	21.3	20.5	21.0	17.9	17.1	17.4
30	19.0	18.0	18.4	23.6	22.8	23.2	21.1	20.3	20.7	17.6	16.7	17.0
31	---	---	---	23.1	22.5	22.8	21.0	20.3	20.6	---	---	---
MONTH	19.0	13.8	15.6	23.6	17.6	21.3	23.5	20.3	21.9	22.0	16.7	19.7

SNAKE RIVER MAIN STEM

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to 1996, February to September 1998, April to September 2000 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to September 1993, June to September 1994, July to September 1996, February to September 1998, May to September 2000 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.0 °C Aug. 3-5, 1994.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 23.4 °C July 30, 31, Aug. 3-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
05...	0930	7080	446	8.0	7.5	7.7	5.5	11.8	114	K20	68
MAY											
08...	0930	7050	426	8.5	11.0	11.9	2.0	9.0	94	K3	K18
JUN											
08...	0900	8970	413	8.7	18.5	15.3	1.4	9.1	107	K4	46
JUL											
18...	0915	10600	410	8.6	20.0	18.1	2.1	8.8	108	K5	K8
AUG											
16...	0915	9820	416	8.2	20.0	16.8	3.2	6.3	75	27	29
SEP											
13...	1315	6250	434	8.4	32.0	17.4	.6	12.1	146	24	K12

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)
SEP								
13...	170	44.2	15.2	19.0	19	3.4	200	2

DATE	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
SEP								
13...	167	40.0	18.8	.7	22.5	265	.36	4470

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR							
05...	.119	<.002	.48	.034	.003	12	229
MAY							
08...	<.005	<.002	.28	.027	.001	5	95
JUN							
08...	.010	.005	.26	.029	.006	3	73
JUL							
18...	.008	.010	.35	.061	.028	3	86
AUG							
16...	.055	.025	.33	.096	.064	7	186
SEP							
13...	.116	.007	.50	.091	.039	8	135

K Results based on counts outside ideal colony range.

WATER TEMPERATURE, DEGREES CELSIUS, MAY TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY	
1	---	---	---	---	---	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---
4	---	---	---	---	---	---
5	---	---	---	---	---	---
6	---	---	---	---	---	---
7	---	---	---	---	---	---
8	---	---	---	---	---	---
9	---	---	---	13.3	12.4	12.7
10	---	---	---	13.3	12.1	12.7
11	---	---	---	12.4	11.5	12.0
12	---	---	---	11.8	11.1	11.4
13	---	---	---	12.2	11.0	11.5
14	---	---	---	13.0	11.5	12.1
15	---	---	---	12.7	11.6	12.0
16	---	---	---	13.3	12.2	12.7
17	---	---	---	12.8	12.1	12.3
18	---	---	---	13.2	12.1	12.5
19	---	---	---	13.3	12.2	12.8
20	---	---	---	13.9	12.8	13.4
21	---	---	---	14.5	13.5	13.9
22	---	---	---	15.0	13.8	14.4
23	---	---	---	15.6	14.5	15.1
24	---	---	---	16.0	15.3	15.6
25	---	---	---	16.6	15.5	15.8
26	---	---	---	16.6	15.3	15.9
27	---	---	---	17.1	15.6	16.3
28	---	---	---	16.4	15.8	16.1
29	---	---	---	16.4	15.3	15.9
30	---	---	---	17.4	15.3	16.2
31	---	---	---	16.6	15.3	15.9
MONTH	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.8	15.5	16.1	20.1	19.5	19.8	22.6	22.1	22.3	20.4	19.8	20.1
2	17.2	16.0	16.4	20.3	19.5	19.8	22.9	22.1	22.5	19.8	19.2	19.6
3	16.4	15.6	15.9	20.3	19.8	20.0	23.4	22.4	22.9	19.3	18.8	19.1
4	17.5	15.6	16.5	20.0	19.3	19.6	23.4	22.8	23.0	19.3	18.5	18.9
5	17.9	16.6	17.2	20.0	19.0	19.5	23.4	22.8	23.0	18.8	17.7	18.3
6	17.4	16.4	16.8	19.5	19.0	19.2	23.1	22.4	22.8	18.0	17.4	17.7
7	18.2	16.9	17.6	19.5	19.0	19.2	22.9	22.1	22.5	18.2	17.1	17.5
8	18.2	17.5	17.7	19.5	18.8	19.3	22.8	21.9	22.3	18.0	17.1	17.4
9	18.0	17.4	17.7	19.5	18.5	19.1	23.3	22.3	22.8	17.2	16.3	16.8
10	18.0	17.2	17.5	20.0	19.3	19.6	23.3	22.4	22.8	17.2	16.3	16.6
11	18.0	17.1	17.5	20.4	19.6	20.0	22.4	21.8	22.1	17.1	16.1	16.5
12	17.4	16.4	17.0	20.8	20.1	20.5	22.6	21.8	22.0	17.5	16.3	16.7
13	17.1	16.4	16.7	21.1	20.4	20.7	22.1	21.6	21.8	17.9	16.4	17.0
14	17.1	16.4	16.7	20.6	20.3	20.4	21.9	21.4	21.6	18.4	17.1	17.6
15	17.1	16.4	16.7	20.8	20.3	20.4	21.8	21.3	21.5	18.5	17.4	17.8
16	16.9	16.1	16.5	22.6	20.4	20.9	21.8	21.1	21.4	18.7	17.4	17.9
17	17.2	16.4	16.7	22.8	20.6	21.3	21.8	21.1	21.4	17.7	16.9	17.2
18	17.4	16.6	16.9	21.6	20.8	21.3	21.6	21.3	21.5	17.7	16.8	17.2
19	17.2	16.4	16.8	22.3	21.3	21.7	21.6	21.1	21.4	18.0	17.2	17.5
20	17.1	16.4	16.7	22.3	21.3	21.6	21.4	20.8	21.1	17.7	16.3	17.0
21	17.4	16.6	16.9	22.3	21.3	21.7	20.9	20.4	20.7	17.2	16.3	16.9
22	17.9	16.9	17.2	22.4	21.4	21.8	21.1	20.3	20.6	16.3	14.5	15.4
23	17.7	16.9	17.4	21.6	20.9	21.2	21.3	20.4	20.7	14.5	13.9	14.2
24	18.5	17.7	18.1	21.9	21.1	21.4	21.1	20.4	20.7	14.7	13.8	14.1
25	19.2	18.5	18.8	22.4	21.3	21.7	21.4	20.6	21.0	14.5	13.5	13.9
26	19.3	18.7	19.0	22.4	21.8	22.1	21.4	20.8	21.0	14.5	13.3	13.8
27	19.8	18.8	19.1	22.6	21.9	22.2	21.4	20.8	21.0	14.5	13.3	13.8
28	19.8	19.0	19.3	22.8	21.9	22.3	21.3	20.8	21.0	14.7	13.3	13.9
29	20.0	18.8	19.3	23.1	22.1	22.5	21.4	20.8	21.0	14.1	13.0	13.4
30	20.4	19.2	19.6	23.4	22.4	22.9	20.9	20.4	20.7	14.1	13.0	13.4
31	---	---	---	23.4	22.6	22.9	20.6	20.1	20.3	---	---	---
MONTH	20.4	15.5	17.4	23.4	18.5	20.9	23.4	20.1	21.7	20.4	13.0	16.61

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

COLLECTION METHODS.--Electrofishing; boat (13A), backpack (11A).

LENGTH OF REACH.--515 m.

TIME ELAPSED FOR EACH COLLECTION METHOD.--13A 0.45 hours; 11A 0.16 hours.

ANOMALY CODES.--AA-none; DE-deformities; ER-eroded fins; LE-lesions; TU-tumors; AL-anchor worms; BL-black spot; CL-leeches; IC-ich; NE-blind; P -other parasites; PE-popeye.

HABITAT QUALITY INDEX.--.NA

COMMENTS.--Large river.

BIOLOGICAL DATA, July 2000
FISH COLLECTION DATA

ORGANISM **FAMILY** *GENUS SPECIES* (COMMON)	DATE	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	LENGTH RANGE TOTAL MM	WEIGHT RANGE IN GM	ORIGIN	TROPHIC GROUP OF ADULTS	TEMPER-ATURE PREFER-ENCE	NUMBER AND TYPE OF ANOMALY
	July 26								
Catostomidae (Suckers)									
Catostomus ardens (Utah sucker)		77	29.6	405-550	750-1700	NATIVE	HERBIVORE	COLD	2-ER,2-DE, 2-LE,7-NE, 1-PA,62-AA
Centrarchdae (sunfishes)									
Micropterus dolomieui (Smallmouth bass)		8	3.1	163-232	70-211	INTRODUCED	PISCIVORE	COOL	1-ER,7-AA
Cottidae (Sculpins)									
Cottus bairdi (Mottled sculpin)		14	5.4	34-95	1-17	NATIVE	INVERTIVORE	COLD	14-AA
Cyprinidae (Carps and minnows)									
Cyprinus carpio (Common Carp)		8	3.1	--	3050-5750	INTRODUCED	OMNIVORE	WARM	1-ER,1-LE,6-AA
Rhinichthys osculus (Speckled dace)		104	40	31.80	1-6	NATIVE	INVERTIVORE	COLD	1-ER,103-AA
Richardsonius balteatus (Redside shiner)		47	18.1	31-73	1-5	NATIVE	INVERTIVORE	COLD	47-AA
Salmonidae (Trouts)									
Oncorhynchus mykiss sp. (Rainbow trout)		1	0.4	115	15	[a]INTRODUCED	INVERTIVORE	COLD	1-AA
Prosopium williamsoni (Mountain whitefish)		1	0.4	90	13	NATIVE	INVERTIVORE	COLD	1-ER
TOTAL NUMBER OF TAXA	8								
TOTAL INDIVIDUALS	260								

a-Rainbow trout are considered native in Idaho downstream of Shoshone Falls and introduced upstream of Shoshone Falls.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to 1996, February to September 1998, April to September 2000 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to September 1993, June to September 1994, July to September 1996, February to September 1998, May to September 2000 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.0 °C Aug. 3-5, 1994.

COLLECTION METHODS.--Composite of 5, 0.25 m^2 samples. Richest targeted habitat--riffles.
MESH SIZE.--425 um.

AVERAGE DEPTH.--0.26 m.

AVERAGE PERCENT SHADING.--8.

AVERAGE VELOCITY.-- 0.65 m/s.

SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4-5.

PERCENT FINES AVERAGE.--4.

BIOLOGICAL DATA, JULY 2000
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE July 26	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION
NON-INSECTS			
Ophidonais serpentina		8	0.15
Uncinais uncinata		16	0.31
Fluminicola n.sp. near fuscus		8	0.15
Physella		8	0.15
Hyalella azteca		448	8.60
Acari		96	1.84
EPHEMEROPTERA			
Baetis tricaudatus		752	14.44
TRICHOPTERA			
Hydropsyche		3224	61.90
Hydroptila		128	2.46
Ochrotrichia		24	0.46
LEPIDOPTERA			
Petrophila		184	3.53
DIPTERA			
Empididae-pupae		48	0.92
Hemerodromia		72	1.38
Simulium		40	0.77
CHIRONOMIDAE			
Chironomidae-pupae		32	0.61
Cardiocladius		8	0.15
Cricotopus		40	0.77
Cricotopus Trifascia group		8	0.15
Paratanytarsus		16	0.31
Polypedilum		48	0.92

SUMMARY STATISTICS
TOTAL NUMBER OF TAXA 20
TOTAL INDIVIDUALS 5,208